From: Jump, Christine
To: Michael Stephenson; SMITH, MARTIN L
Subject: FW: dalapon
Date: Wednesday, May 14, 2014 4:50:00 PM
Attachments: EPA_Region_7_Laboratory_Analysis_Information_14_05_14_02_07_00.txt

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Mike-

Attached is the response I received from out lab people on the dalapon question. I am not a chemist, so I don't know how clear the information in the attachment will be to you or your contract lab, but Margie said you are welcome to call her if there are questions.

Margie St. Germain – 913-551-5154.

Chris Jump, L.G.
Waste Remediation and Permitting Branch
US EPA, Region 7
jump.chris@epa.gov
(913) 551-7141

Mailing address: 11201 Renner Boulevard, Lenexa, KS 66219

From: StGermain, Margie
Sent: Wednesday, May 14, 2014 2:19 PM
To: Jump, Christine
Subject: RE: dalapon

Chris,

The method that you want to use is called Herbicides in Soil. This method also looks for 2,4-D. I have included a description of the procedure.

Our contractor can perform the analysis including Dalapon. Typical reporting limits are 10 ug/kg or 0.010 mg/kg. This should not be a problem to meet the RSL.

If you have any questions, feel free to call me. I am at the RO on Thursday this week.

Margie
x-5154

From: Jump, Christine
Sent: Monday, May 12, 2014 1:08 PM
To: StGermain, Margie
Subject: dalapon

Margie-

I don't know if you are the person to ask or not, but I have a site where we are looking for the herbicide dalapon in the soil. The RSL soil to GW numbers are very low for this compound (0.041 mg/kg).

What analytical method should the PRP be using and what detection/quantitation limits should they be able to achieve (under ideal circumstances)?

Thanks.

Chris Jump, L.G.
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05/14/2014 14:07
EPA Region 7 Laboratory Analysis Information
1 of 2
Analysis Short Name Herb S.2I
Analysis Name: Herbicides in Soil by GC/EC
Parameter Class: Pesticides
Matrix: Solid Analysis Status: Current
This analysis provides analytical data for 5 chlorophenoxy acid compounds in a soil sample by RLAB
Method 3240.2. Soil samples are analyzed for total herbicides and originate from an array of different
sources, as well as different programs, such as Superfund and RCRA. However, this method still
satisfies all of the applicable program requirements (and potentially other programs as well). This
analysis is based on SW-846 Method 8150 and SW-846 8151A.
The presence and concentrations of these compounds are determined through an extraction phase
followed by analysis of the extract. An subsample, 50 g, is acidied with sulfuric acid and extracted with
acetone and diethyl ether. A hydrolysis step is included which produces an extract that will contain all
forms of the herbicides. The analysis is conducted by injecting the sample extract into a gas
chromatograph (GC) with an electron capture detector (EC). Compound reporting limits are typically in
the low (<10) part per billion range. Matrix interferences can occur and may complicate the analytical
process. If there is a matrix interference, dilutions may be performed and higher reporting limits
reported. Potential other sources of interferences include contaminated laboratory equipment and/or
chemicals. However, higher reporting limits are typically the result of the sample matrix interferences
and not laboratory materials.
Analysis Summary:
Method: RLAB Method 3240.2I Herb Date Adopted: 07/24/2012 Date Replaced:
EPA Region 7 RLAB Method 3240.2I
Method Desc:
Organic Analyses by GC/ECD
Method Title:
This analysis is performed using Region 7 RLAB Method 3240.2I. The samples are extracted from the
various matrixes using methylene chloride. The extracts are concentrated, cleaned up according to RLAB
Method 3210.2, if necessary, and exchanged to iso-octane. The samples are analyzed by GC/ECD using
dual column confirmation. The method is based on RCRA SW846 methods 8081, 8082, 8150, 3535, and
EPA method 608.
Method Summary:
RLAB Method 3240.2I
SW846 8150
SW846 8151A
Base Method(s)
Pesticides and Herbicides by GC/ECD
Chlorinated Herbicides by GC Using Methylation or
Pentafluorobenzylation Derivatization
Title
Analysis
Analysis
Analysis
Type

EPA (In-House)
RASP (Out-Source)
Capable Labs:
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EPA Region 7 Laboratory Analysis Informatio 2 of 2 05/14/2014 14:07
Analysis Name: Herbicides in Soil by GC/EC
Previous Method:RLAB Method 3240.2H Date Adopted: 01/21/2010 Date Replaced:
07/24/2012
Sample Holding Time 14 Extract Holding Time: 40 Weight Type: Dry
Container Type: 8 oz glass No Of Containers: 1 No Of Tags: 1
Preservative: 4 Deg C
RLAB Method 3230.2C S
Sampling Info:
Collect soil samples in 8 oz glass containers. Follow conventional sampling
practices. Ice or refrigerate
the samples at 4 degrees C from the time of collection until extraction.
Sampling Narative:
Yes
Yes
Yes
Con
Non
Con
Con
Yes
Non
Con
Con
Con
Yes
Non
Non
Surr
Default
Report Flag
2,4,5-T
2,4,5-TP
2,4-D
2,4-DB
Bentazon
Chloramben
Dalapon
Dicamba
Dichlorprop
Dinoseb
MCPA
MCPP
Pentachlorophenol
Picloram
Triclopyr
DCPAA
Analyte Name
93-76-5
93-72-1
94-75-7
94-82-6
25057-89-0
133-90-4
75-99-0
1918-00-9
120-36-5
88-85-7
94-74-6

7085-19-0
87-86-5
1918-02-1
55335-06-3
CAS Number
10
10
20
10
20
4
7.5
TRL
ug/kg
ug/kg
ug/kg
ug/kg
ug/kg
ug/kg
ug/kg
ug/kg
ug/kg
ug/kg
ug/kg
ug/kg
ug/kg
ug/kg
ug/kg
ug/kg
% Rec
Units
Certified
Certified
Certified
Certified
Certified
RLAB Nelac Status
SW846 8151
SW846 8151
SW846 8151
SW846 8151
SW846 8151
RLAB NELAC Status applies specifically to analyses performed in the Region 7 Laboratory. Analyses done by out-source contract labs may not have this certification.
Days Days
Con
Non
Surr
Yes
Default Report Flag: Analyte that is not reported from in-house analysis and must be obtained through an out-source contract lab.
Analyte that is not routinely reported from in-house analysis, but can be if it is needed.
Surrogate compound for quality control purposes.
Analyte that is routinely reported from in-house analysis.
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